

**Sea Turtle Program Overview
Southeast Fisheries Science Center
Galveston Laboratory**

Summary of primary ongoing and proposed (funded) sea turtle research and monitoring activities for sea turtles, including international research and monitoring activities, if applicable.

Captive rearing of loggerhead sea turtles (Higgins)

The NOAA Sea Turtle Facility (NSTF) maintains a captive stock of 1-4 year-classes of Florida loggerheads that are available for research. A two year-old, captive reared loggerhead is the standard for evaluating and certifying turtle excluder devices (TEDs). The NSTF currently hold 420 loggerheads from 3 year-classes.

Sea Turtle Stranding and Salvage Network (Kethan)

We conduct weekly beach surveys of Stat Zone 18 (100 miles from Freeport, TX to Sabine Pass, TX). Stat Zone 18 is considered an index area, as the beach is surveyed year-around. Stranded sea turtles and marine mammals are documented and tissues are collected for various aging and research projects.

Sea Turtle Nesting and Rehabilitation (Higgins)

Live stranded and hook & line captured sea turtles found on the Upper Texas Gulf Coast are brought to the NOAA Fisheries Sea Turtle Facility in (NSTF) Galveston for treatment and rehabilitation. The NSTF treats and releases 10-20 sea turtles annually. Most strandings are reported by the public and the NSTF emergency response team responds to live strandings 24/7. The NSTF staff also respond to sea turtle nestings, relocate eggs, and satellite tag nesters and juvenile Kemp's ridleys taken by recreational hook & line, in cooperation with Texas A&M University at Galveston.

Status of or involvement in initiatives such as SAIP, TEWG, modeling exercises, etc.
none

Summary of ongoing and proposed sea turtle bycatch reduction gear research
(Higgins)

Turtle Excluder Device Testing

Captive reared loggerheads are used annually, for the evaluation and certification of TEDs in trawls. The loggerheads are captive reared at the NSTF in Galveston, transported and used in field gear research [NOAA Panama City, Florida, Laboratory], tagged and released into Florida waters.

Longline Related Research

The NSTF maintains facilities and large sample sizes (100+ of each year class) of turtles that are used by government and non-government researchers. Recent hosted research

includes members of the Pelagic Fish and Sea Turtle Sensory Biology Group [NMFS PIFSC/University of Hawaii/University of North Carolina] which are investigating: Vision (longline lightsticks, bait color, predator avoidance); Olfaction (chemoreception/detection of odors - attractants/repellants, artificial baits); and Hearing. Research on hook size, bait and baiting techniques [NMFS SEFSC] was recently completed as was research on the interaction with bristledogs on welk pots [VIMS/NMFS NEFSC]. Research is approved to investigate bite force and swallowing mechanics in loggerheads [Texas A&M University at Galveston].

Other Gear Research

Captive reared loggerheads have been used to evaluate interactions with welk pots and gill nets [NC flounder nets]. Captive and wild rehabilitating turtles are used for species identification, handling and tagging training for observers, law enforcement and USCG personnel.

Summary of involvement in broader agency working groups/issues where your program is representing the marine turtle program (Higgins)

- We are the only laboratory in the Western Gulf of Mexico. We provide support and logistical help to sea turtle research conducted by Texas A&M University at Galveston and to local state & federal law enforcement. We provide sea turtle holding facilities, and both captive and wild [rehabilitated through stranding program] sea turtles for research.
- We are part of a multi-national [NMFS Honolulu based] Pelagic Fish and Sea Turtle Sensory Biology Group. We host research and provide research facilities and access to captive reared loggerheads.
- We are the only agency permitted to physically handle sea turtles on the Upper Texas Gulf Coast. Kemp's ridley nesting in Texas is experiencing exponential growth. In that capacity, we respond to nestings through a cooperative agreement with the USFWS and NPS. We are also the sea turtle hospital for the Upper Texas Gulf Coast and we provide in-house treatment and rehabilitation for sick and injured turtles found on the Middle Texas Coast all the way to Grand Isle, LA (~160 miles coast).
- When requested, we provide response, support and rehabilitation services & facilities in response to sea turtle cold stunning events.
- The NSTF is ideally suited for the evaluation of antibiotic and other medications and we have participated in pharmacokinetic studies using captive reared loggerheads.

Upcoming sea turtle (or related) meetings and/or workshops your FMC staff will be convening or participating in during 2006.

RAW 2006 (Regional Aquatic Workshop) May 14-21, 2006. Moody Gardens, Galveston, Texas.

NOAA will be co-hosting the Special Sea Turtle Symposium portion, May 20-21 and holding workshops on sea turtle husbandry, handling, necropsy and tagging.

Anticipated changes in staffing or hiring of new sea turtle program staff in 2006

Protected Species Branch Chief position was vacated by retirement in Sept. 2005.